



## 8. THE MORPHOPATHOLOGICAL ASPECT OF METABOLIC-ASSOCIATED FATTY LIVER DISEASE.

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**Introduction.** Being proposed in 2020, the novel terminology for Metabolic-Associated Fatty Liver Disease (MAFLD) involves the strong association of fatty liver disease with metabolic factors rather than NAFLD, the term used to describe fatty liver conditions in the absence of significant alcohol consumption. The terminology transition involves the optimization of the wide spectrum of individuals with hepatic steatosis and their inclusion in a subphenotype that would comprise those with metabolic risk factors such as obesity, metabolic risk abnormalities and diabetes 2 mellitus. The accurate diagnosis of MAFLD necessitates a comprehensive and multidisciplinary approach, since one of the most relevant aspects in the diagnostic process is the histopathological examination in conjunction with clinical, laboratory and imaging assessments.

**Aim of study.** The purpose of the study involves recognition of distinctive histopathological criteria understanding different aspects of the disease, its mechanisms, risk factors and associations, diagnostic accuracy, treatment efficacy and overall impact on health.

**Methods and materials.** The research was carried out by reviewing a range of research studies and scientific literature from the PubMed database over the last years. An extensive investigation in English was performed on several articles related to the keywords: MAFLD, metabolic, morphopathology.

**Results.** Following the analysis of the reference literature it was found that for establishing the diagnosis of MAFLD an important link is the presence of overweight, type 2 diabetes mellitus or dysregulated metabolic factors. These criteria in association with steatosis contributes to the progression of the disease as well as the generation of extrahepatic complications. The histopathological analysis reveals the presence of lipid infiltrate in hepatocytes which, in association with oxidative stress, causes the subsequent appearance of high inflammatory activity and cirrhosis. The conclusive factor remains the significantly increased risk for fibrosis, cardiovascular associated diseases and gut dysbiosis.

**Conclusion.** Although the new classification presents many nuances and imperfections, histopathologically it is assumed that the specific triad for MAFLD "steatosis-inflammation-fibrosis" includes a favorable pharmacological scenario. The diversity of cardiovascular complications and other metabolic comorbidities helps to clearly delimit the pathogens, presenting an essential advantage to the new nomenclature. Unfortunately, being a relatively recently introduced term, it requires time for additional research as well as multidisciplinary involvement.